

REMARKS

Claims 1-9 are pending in the application. Claim 9 has been added.

Claim Rejections - 35 U.S.C. § 103

(a) Claims 1 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mikami et al. (U.S. Patent 6,655,133) in view of Murachi et al. (U.S. Patent 5,746,989). This rejection is respectfully traversed.

In the Office Action, the Examiner acknowledges that the Mikami et al. reference fails to disclose calculating a discharged particulate amount from a map on the basis of an excess air ratio.

Therefore, the Examiner relies on the Murachi et al. reference and alleges that it “teaches that a discharged particulate amount from the engine is calculated based on an amount of fuel burned in the engine, wherein an excess ratio is derived from the fuel amount burned in the engine (see col. 11, lines 32-35).”

However, Murachi et al. merely states, in col. 11, lines 32-37:

It is considered that the amount of the carbon particles discharged from the engine is approximately proportional to the amount of fuel burned in the engine.
and does not disclose or suggest that the amount of discharged particulates is obtained from “a map, that stores relationship between an excess air ratio and a corresponding amount of discharged particulates, on the basis of an actual excess air ratio,” as recited in claim 1. This feature of the present invention is disclosed at least in Fig. 3A of the present application.

If the Examiner determines that this art grounds of rejection should be maintained, the Examiner is respectfully requested to specify where the “map” is disclosed in either the Mikami et al. or Murachi et al. references.

Therefore, even assuming that Mikami et al. and Murachi et al. can be combined, which Applicants do not admit, Mikami et al. and Murachi et al., taken singly or in combination, fails to disclose or suggest the foregoing claimed feature of the present invention.

Claim 8, dependent on claim 1, is allowable at least for its dependency on claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claims 6 and 7 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mikami et al. in view of Murachi et al., and further in view of Schaller (U.S. Patent 7,137,248). This rejection is respectfully traversed.

Claims 6 and 7, variously dependent on claim 1, are allowable at least for their dependency on claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Allowable Subject Matter

Applicants appreciate the Examiner’s indication that claims 2-5 are allowable over the prior art of record.

New Claim

Claim 9 is similar to claim 1, but claims “a map” as an element of the claim.

This claim is allowable at least because none of the references of record discloses or suggests “a map that stores relationship between an excess air ratio and a corresponding amount of discharged particulates,” as recited therein.

A favorable determination by the Examiner and allowance of this claim is earnestly solicited.

Conclusion

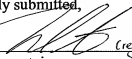
Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and objections, and allowance of the pending claims are earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi, Reg. No. 40,417 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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